

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Page 5

REMARKS

The Office Action of June 12, 2002, has been carefully reviewed, and in view of the above amendments and the following remarks, reconsideration and allowance of the pending claims are respectfully requested.

In the above Office Action, claims 1-11 were rejected under 35 U.S.C. § 112, second paragraph, and claims 1-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lynnard et al.* (PCT Patent No. WO 98/27904) in view of *Meierhoefer* (U.S. Patent No. 4,1104,214).

The Examiner's comments regarding an insufficient antecedent basis for several claim limitations have been carefully considered and the claim have been amended as set forth above to remedy the same. Accordingly, Applicants respectfully submit that the rejection under Section 112, second paragraph, should be withdrawn.

Claim 1 of the present application is directed to an absorbent article having an absorbent body enclosed between a backing sheet and a material laminate. The material laminate includes a top sheet and a liquid transfer sheet. The top sheet and the liquid transfer sheet are joined together through the use of laminate bonding locations which thereby define sheet joining regions. The sheet-joining regions of the material laminate extend in the thickness direction of the material laminate through the top sheet and at least partially through the liquid transfer sheet. As amended herein, claim 1 further recites that the liquid transfer sheet is compressed at the laminate bonding locations.

As explained in greater detail in the specification, beginning on page 32, line 29, the compression of the liquid transfer sheet at the laminate bonding locations enhances

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Page 6

liquid transport into the liquid transfer sheet and towards the absorbent core due to the reduced pore size in the compressed area. This arrangement enables the liquid transfer sheet to effectively drain liquid away from the top sheet, thereby presenting a drier feeling against the skin of the user.

The primary reference upon which the Examiner relies, *Lynard et al.* (WO 98/27904) discloses a sanitary napkin comprising an absorbent core (42), which is positioned between a liquid impervious back sheet (40) and a material laminate consisting of a top sheet (38) and an acquisition component (44). Both the top sheet (38) and the acquisition component (44) may contain a thermoplastic material and are bonded to each other by fusion at a number of bonded areas (52). *Lynard et al.* does not describe the structure of the bonding area. Contrary to the present invention *Lynard et al.* also does not suggest that the bonds (52) affect the acquisition component (44) or that the fluid transfer could be enhanced by a compression at the bonding areas, as recited in claim 1. Accordingly, *Lynard et al.* does not suggest a liquid transfer sheet that is compressed at the laminate bonding locations, as presently claimed.

Further, although *Lynard et al.* discloses that the absorbent core (42) may comprise superabsorbents, it does not teach the use of partially neutralized superabsorbents, as in claim 1 of the present invention. As such, the Examiner relies upon *Meierhoefer* (U.S. Patent No. 4,104,214) to supply this missing teaching. *Meierhoefer* however discloses a regenerated cellulose fiber having a pH of 5-7.5 for use in absorbent articles. Applicants respectfully contend that such a regenerated cellulose structure is not a superabsorbent as such term is used by one skilled in the art and as disclosed in the present specification (see

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Page 7

page 12, lines 4-9). The regenerated cellulose fiber also does not have the excellent liquid retaining properties or capacity of retaining liquids when the structure is subjected to compression as would conventional superabsorbents, which are based on polyacrylate. Accordingly, Applicants submit that evening combining the teaching of *Lynard et al.* and *Meierhoefer* would not render obvious the subject matter of claim 1.

### CONCLUSIONS

In view of the above amendments and remarks, Applicant respectfully submits that the claims of the present application are now in condition for allowance, and an early indication of the same is earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference would be helpful in resolving any remaining issues pertaining to this application, the Examiner is kindly invited to call the undersigned counsel for applicant regarding the same.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By:



Wendi L. Weinstein  
Registration No. 34,456

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: September 12, 2002

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Mark-up of Claims - Page 1

Attachment to Amendment dated September 12, 2002

1. (Amended) An absorbent article, [such as a diaper, sanitary napkin, incontinence protector, wound dressing or the like,] comprising:  
an absorbent body [(12)] enclosed between a liquid-impermeable backing sheet [(11)] and a material laminate [(1)] in the form of a liquid permeable, fibrous sheet of material [(2)] forming a top sheet [(2)], and a liquid-permeable, porous and resilient sheet of material [(3)], forming a liquid transfer sheet [(3)] lying proximal to the absorbent body [(12)],

wherein the material laminate [(1)] has a planar extension and a thickness direction perpendicular to said planar extension,

wherein at least one of the top sheet and the liquid transfer sheet [sheets (2, 3)] includes thermoplastic material, and [wherein] the top sheet and the liquid transfer sheet [two sheets (2, 3)] are joined together through the [medium] use of laminate bonding locations [(4)] on the material laminate [(1)], within which the thermoplastic material is caused to at least partially soften or melt and thereby join together [said two] the top and liquid transfer sheets [(2, 3)] at a sheet joining region, [characterised in that]

wherein the absorbent body includes a partially neutralised superabsorbent; and [in that]

wherein the sheet-joining regions of the material laminate extend in the thickness direction of said material laminate [(1)] through the top sheet [(2)] and at least partially through the liquid transfer sheet [(3)] such that the liquid transfer sheet is compressed at the laminate bonding locations.

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Mark-up of Claims - Page 2

Attachment to Amendment dated September 12, 2002

2. (Amended) An absorbent article according to Claim 1, [characterised in that] wherein the laminate bonding [regions] locations are disposed in two or more groups [(5)] where each group includes at least two said laminate bonding locations [(4)], wherein the largest relative distance between two mutually adjacent laminate bonding locations [(4)] in a given group [(5)] is smaller than the smallest distance between a group [(5)] and its nearest neighbouring group [(5)], wherein the material laminate [(1)] includes, between the laminate bonding locations [(4)] in each [bonding] said group [(5)] first non-bonded laminate regions [(6)] that have a greater density than second non-bonded laminate regions [(9)] located between respective [bonding] said groups [(5)].

3. (Twice Amended) An absorbent article according to Claim 1, [characterised in that] wherein the partially neutralized superabsorbent has a degree of neutralisation such that the pH in the absorbent body of the article when wetted will lie in the range of 3.5-4.9 [, preferably 4.1-4.7].

4. (Twice Amended) An absorbent article according to Claim 2, [characterised in that] wherein the laminate bonding locations [(4)] include punctiform bonds, linear bonds, rectangular bonds or circular bonds.

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Mark-up of Claims - Page 3

Attachment to Amendment dated September 12, 2002

5. (Twice Amended) An absorbent article according to Claim 1, [characterised in that] wherein the top sheet [(2)] has through-penetrating holes within the laminate bonding locations [(4)].
6. (Twice Amended) An absorbent article according to Claim 1, [characterised in that] wherein the top sheet [(2)] is comprised of a nonwoven material.
7. (Twice Amended) An absorbent article according to Claim 1, [characterised in that] wherein the top sheet [(2)] is comprised of a carded, thermobonded nonwoven material.
8. (Twice Amended) An absorbent article according to Claim 1, [characterised in that] wherein the liquid transfer sheet [(3)] is a fibre wadding sheet having a thickness of 0.5-4 mm.
9. (Twice Amended) An absorbent article according to Claim 1, [characterised in that] wherein the smallest distance x between two mutually adjacent groups [(5)] of laminate bonding locations [(4)] is at least twice the size of the greatest distance y between two mutually adjacent laminate bonding locations [(4)] in respective groups [(5)].

Application No. 09/856,904  
Attorney's Docket No. 000500-299  
Mark-up of Claims - Page 4

Attachment to Amendment dated September 12, 2002

10. (Amended) An absorbent article according to Claim 9, [characterised in that] wherein the ratio of x/y between the distances x and y is from 2/1 to 12/1.

11. (Twice Amended) An absorbent article according to Claim 9, [characterised in that] wherein x is 2-6 mm and y is 0.5-1 mm.